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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/530,236

04/04/2005

Shunji Mitsuyoshi

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22807 7590 11/14/2008  
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EXAMINER

LERNER, MARTIN

ART UNIT

PAPER NUMBER

2626

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/530,236	<b>Applicant(s)</b> MITSUYOSHI, SHUNJI	
	<b>Examiner</b> MARTIN LERNER	<b>Art Unit</b> 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1 to 9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 to 6 is/are allowed.
- 6) ☒ Claim(s) 7 to 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/04/05 &amp; 10/01/07</u> .                                 | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 7 to 9 are objected to because of the following informalities:

It is unclear whether there are eight claims or nine claims in the current application. Originally, there appear to be nine claims filed, claims 1 to 9, but the preliminary amendment indicates only eight, claims 1 to 8. Both the original claims and the preliminary amendment were filed on the same day, 04 April 2005, and there are no instructions for entering claim amendments for the claims from the preliminary amendment, so there is no way to determine whether cancellation of claim 9 was intended by Applicant. It will be presumed that there are nine claims pending in the current application for purposes of the rejection, but Applicant should clarify what claims are pending by including claim status identifiers in any response.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 7 to 9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 7 to 9 represent non-statutory subject matter because they set forth a computer program that is not embodied in a computer readable medium. The USPTO takes the position that a computer program, *per se*, does not comply with the requirements for statutory subject matter because it does not fall within one of the enumerated statutory classes of invention, *e.g.* process, manufacture, and composition of matter, unless it is incorporated into a computer readable medium. Ordinarily, Applicant may simply amend the claims to recite that the computer program is stored in a computer readable medium to overcome the rejection of non-statutory subject matter under 35 U.S.C. §101. Here, however, Applicant has no disclosure in the Specification as originally filed for any computer readable medium. Thus, claims 7 to 9 must be cancelled because any introduction of a preambular limitation embodying the computer program in a computer readable medium would go beyond what is originally disclosed by Applicant's Specification.

***Allowable Subject Matter***

4. Claims 1 to 6 are allowed.
5. The following is a statement of reasons for the indication of allowable subject matter:

Independent claims 1 and 4 are allowable because the prior art of record does not disclose or reasonably suggest a spontaneous emotion unit that causes state transitions to occur repeatedly between emotion states according to an operation representing a stochastic model of a Schrödinger equation, in combination with a

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knowledge database that classifies collected knowledge depending on degrees of correlation with emotion states. *Chase* represents the closest prior art of record, disclosing an association between emotional descriptors and words or phrases of a given subject in a language. Thus, a record identifies a context and part of speech for a given word or phrase having a traditional dictionary definition, and associated with each record are one or more emotional descriptors from one or more emotional categories. (Column 10, Lines 19 to 28) *Sadakuni* ('056) teaches an interactive artificial intelligence device, where behavior is modified based on the device's experience through transitions between emotional states. (Column 14, Line 32 to Column 15, Line 62: Figures 10 to 12) However, *Chase* at least does not disclose searching a knowledge database for related knowledge using a search key, and *Sadakuni* ('056) does not cause transitions between emotion states to occur repeatedly according to a stochastic (random) model. Applicant's Specification, Page 3, Lines 13 to 21, teaches an objective to provide an inspiration model device that simulates human conception by providing emotional fluctuations similar to a 'brainstorm'.

Independent claims 3 and 6 are allowable because the prior art of record does not disclose or reasonably suggest a spontaneous emotion unit that causes state transitions to occur repeatedly between emotion states according to an operation representing a stochastic model of a Schrödinger equation, in combination with a surface storage unit that captures reaction to emotion states and stores them for a predetermined period and forgets them after a predetermined period has elapsed, and increasing and decreasing probabilities by encouragement and suppression when a

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frequency becomes greater than a prescribed value. *Sadakuni* ('056) teaches an interactive artificial intelligence device, where behavior is modified based on the device's experience through transitions between emotional states. (Column 14, Line 32 to Column 15, Line 62: Figures 10 to 12) Moreover, it is known that neural networks are operative to increase and decrease probabilities of state transitions through a learning algorithm. However, the prior art of record does not disclose or reasonably suggest at least forgetting a combination of an external input and an emotion state after a predetermined time period has elapsed, and causing transitions between emotion states to occur repeatedly according to a stochastic (random) model. Applicant's Specification, Page 3, Lines 13 to 21, teaches an objective to provide an inspiration model device that simulates human conception by providing emotional fluctuations similar to a 'brainstorm'.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARTIN LERNER whose telephone number is (571)272-7608. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Martin Lerner/  
Primary Examiner  
Art Unit 2626  
November 10, 2008